

REMARKS

Claims 1-11 are pending.

In the Office Action dated August 16, 2006, the Examiner has rejected all the pending claims. Specifically, claims 1, 4, 6, 7 and 10 are rejected under 35 U.S.C. § 102(b) as anticipated by U.S. Patent No. 6,455,965 to Akahori (the "Akahori '965 Patent"). Claims 2, 3, 5, 8, 9 and 11 are rejected under 35 U.S.C. § 103(a) as obvious over the Akahori '965 Patent. In making the obviousness rejections, the Examiner has taken Official Notice of the elements in the dependent claims as distinguished from independent claim 1, which the Examiner has rejected as anticipated by the Akahori '965 Patent.

Applicant respectfully disagrees that the Akahori '965 Patent discloses or even suggests all of the elements of independent claim 1. Claim 1 is directed to a spindle motor and claim 2 is directed to a bearing unit that recites, *inter alia*, "a disc clamp centering tube . . . wherein said disc clamp centering tube is welded to the hub of the rotating unit." None of the cited art discloses or suggest such "a disc clamping device." As explained in Applicant's specification, a "spindle motor having a separate disc clamp centering tube welded to the hub of the spindle motor reduces the overall cost of manufacturing a spindle motor as it can be welded to the hub after the bearing system assembly in the hub has been finalized. Additionally, the risk of uncured adhesive and outgassing problem are completely eliminated." Publication No. U.S. 2002/0240104 at [0023].

The Akahori '965 Patent does not disclose a spindle motor having, *inter alia*, "a disc clamp centering tube . . . wherein said disc clamp centering tub is welded to the hub of the rotating unit." Rather, a cover 35 is disclosed that in part covers the bearings, very likely to

prevent the escape of contaminants from the bearing system into the clean chamber housing the discs. As shown in Figure 1 of the Akahori '965 Patent, the cover 35 does not perform any role in centering the disc clamp. The disc clamp is shown in phantom as item 38 remote from cover 35. In the spindle motor shown in the Akahori '965 Patent, it appears that hub main body 6A includes an integrated boss about which the disc clamp 38 is mounted. Thus, the cover 35 has no role in centering the disc clamp. In contrast, in independent claims 1 and 2, a disc clamp centering tube is used to center the disc clamp, as shown, for example, in Figure 1 of Applicant's specification. Thus, claims 1 and 2 are not anticipated by the Akahori '965 Patent.

Furthermore, Applicant disagrees that it is a matter of mere design choice well-known in the art to utilize a conical hydrodynamic bearing or to utilize a disc clamp centering tube of the same material as the hub that is welded to the hub. As indicated in Applicant's specification, the prior art discloses integrating a boss with the hub, as appears to be shown in the Akahori '965 Patent or a separate base that is attached with an adhesive. The prior art of record does not show use of a conical hydrodynamic bearing or a disc clamp centering tube of the same material as the hub.

For the forgoing reasons, Applicant respectfully submits claims 1-11 are readily distinguishable and allowable over the cited prior art.

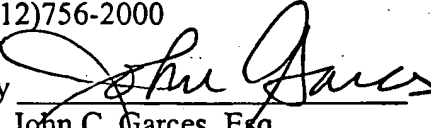
The Examiner is urged to telephone Applicants' undersigned counsel if it will advance the prosecution of this application. The Patent and Trademark Office is authorized to charge any fees required for the entry of this Response, including fees for an extension of time, and any further fees that are properly assessable in this case, or to credit any overpayment, to

Deposit Account No. 50-0675, Order No. 057517/0041. In the event that an extension of time is needed for entry of this Response that is not otherwise provided for, such extension of time is hereby respectfully requested.

Respectfully submitted,

Schulte Roth & Zabel LLP  
Attorneys for Applicants  
919 Third Avenue  
New York, NY 10022  
(212)756-2000

By

  
John C. Garces, Esq.  
Reg. No. 40,616

Dated: November 14, 2006  
New York, New York

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

Name: Roxanne Garcia

Signature: 

Dated: November 14, 2006



U.S. PATENT AND TRADEMARK OFFICE  
FACSIMILE TRANSMISSION

**DATE :**

12/11/06

**TO:**

(212) 593-5955  
(FACSIMILE NUMBER)

(FACSIMILE NUMBER)

Mr. John C. Garces  
(NAME)

(NAME)

Schulte, Ruth-Zabel  
(ORGANIZATION)

(ORGANIZATION)

(212) 756-2000  
(TELEPHONE NUMBER)

(TELEPHONE NUMBER)

**SENDER:**

A. J. Heinz  
(NAME)

(NAME)

(FACSIMILE NUMBER)

(571) 272-7587  
(TELEPHONE NUMBER)

(TELEPHONE NUMBER)

NUMBER OF PAGES 2 , INCLUDING THIS PAGE.

If you have not received all pages of this transmission, please contact this Examining Group as soon as possible at the above telephone number.

**FOR PTO STAFF ONLY**

[ ] If this box is checked, please discard all  
pages of this transmission

Application/Control Number: 10/787,009

Page 2

Art Unit: 2627

A disk drive spindle motor comprising:

a rotating unit including a hub and a permanent magnet secured to said hub;

a stationary unit including a bracket and a stator core with a coil winding; and

a bearing unit including ~~a fixed shaft~~ mounted on said bracket, a bushing secured to said hub, a disc clamp centering tube which is adapted to center a disk in the disk drive and about which the disk surrounds and at least one bearing element supporting said bushing for its rotation with respect to said shaft,

wherein said disc clamp centering tube is welded to the hub of the rotating unit.

\*\*\*\*\*  
TRANSMISSION REPORT  
\*\*\*\*\*

(TUE) DEC 12 2006 11:17

12125935955 SCHULTE ROTH & ZABEL LLP

DOCUMENT #	TIME STORED	TIME SENT	DURATION	PAGE(S)	MODE	RESULT
4961207-655	12.12 11:16	12.12 11:15	3.0	2	ECM	OK

DESTINATION	DST. TEL #
041#1571273800#	9008#0575170041#1571273800#

## SCHULTE ROTH & ZABEL LLP

919 Third Avenue  
New York, NY 10022  
(212) 756-2000  
fax (212) 756-8055

www.srz.com

2006 DEC 12 AM 11 07

**FACSIMILE**  
PLEASE DISTRIBUTE TO ALL LISTED PERSONS

To	Company	Fax No.	Confirmation No.
A. Jo Heinz, Examiner	U.S. Patent & Trademark Office	(571) 273-8300	(571) 272-7587

<b>FROM:</b> John C. Garces	<b>DATE:</b> December 12, 2006
<b>DIRECT DIAL:</b> (212) 756-2215	<b>Number of Pages:</b> 2
<b>Number of Cover Sheets:</b> 1	(Including Cover Page)
<b>FILE NO.</b> 057517/0041	
<b>SERIAL No.:</b> 10/787,009	

**Additional Message:**

*Revised claim language as we discussed.*

# SCHULTE ROTH & ZABEL LLP

919 Third Avenue  
New York, NY 10022  
(212) 756-2000  
fax (212) 756-6955

www.srz.com

2006 DEC 12 AM 11 07

## FACSIMILE PLEASE DISTRIBUTE TO ALL LISTED PERSONS

To	Company	Fax No.	Confirmation No.
A. Jo Heinz, Examiner	U.S. Patent & Trademark Office	(571) 273-8300	(571) 272-7587

FROM:	John C. Garces	DATE:	December 12, 2006
DIRECT DIAL:	(212) 756-2215	Number of Pages:	2
Number of Cover Sheets:	1		(Including Cover Page)
FILE NO.	057517/0041		
SERIAL NO.:	10/787,009		

### Additional Message:

*Revised claim language as we discussed.*

10302916.1

THE INFORMATION CONTAINED IN THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY NAMED ABOVE. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE IMMEDIATELY NOTIFY US BY TELEPHONE, AND RETURN THE ORIGINAL MESSAGE TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

*For incomplete transmission please call (212) 756-2000 ext.6076*

Application/Control Number: 10/787,009

Page 2

Art Unit: 2627

A disk drive spindle motor comprising:

a rotating unit including a hub and a permanent magnet secured to said hub;

a stationary unit including a bracket and a stator core with a coil winding; and

a bearing unit including a fixed shaft mounted on said bracket, a bushing secured to said hub, a disc clamp centering tube which is adapted to center a <sup>disc</sup> disk  
in the disk drive and about the disc clamp centering tube  
which the disk surrounds

and at least one bearing element supporting said

bushing for its rotation with respect to said shaft,

wherein said disc clamp centering tube is welded to the hub of the rotating unit.



**This Page is Inserted by IFW Indexing and Scanning  
Operations and is not part of the Official Record**

**BEST AVAILABLE IMAGES**

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** \_\_\_\_\_

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.**